

What is claimed is:

1. An instrument for manipulating a vessel in a patient comprising:
a working head shaped to define a working space in the tissue of a patient; and
a first manipulator for manipulating a vessel located proximate the working space, the first manipulator having a retracted position and an extended position, the first manipulator disposed at least partially within the working space when in the retracted position.
2. The retractor of claim 1, wherein the working head has a medial axis and the first manipulator is offset from the medial axis.
3. The retractor of claim 1, wherein the first manipulator comprises a first rod having a distal end and a proximal end, the first rod being rotatably connected to the working head, and at least a first paddle connected to a distal portion of the first rod.
4. The retractor of claim 3, wherein the first rod is rotatably connected to the working head at the distal end of the first rod.
5. The retractor of claim 3, wherein the first paddle is shaped to nest within the working head when the first paddle is in the retracted position.
6. The retractor of claim 3, wherein the first paddle extends at least partially outside the working space defined by the working head when the first paddle is in the extended position.
7. The retractor of claim 3, wherein the first paddle has a curved portion.
8. The retractor of claim 6, wherein the curved portion forms a concave surface that faces away from the working head when the first paddle is in the extended position.
9. The retractor of claim 3, comprising:
a second manipulator, the second manipulator comprising a second rod having a distal end and a proximal end, the second rod being rotatably connected to the working head, the second rod being spaced from the first rod; and

a second paddle connected to a distal portion of the second rod, the second paddle having a retracted position and an extended position.

10. The retractor of claim 9, wherein the first rod and the second rod extend distally in a longitudinal direction, and one of the first paddle and the second paddle is offset in the longitudinal direction with respect to the other of the first paddle and the second paddle.

11. The retractor of claim 1, comprising:

a handle;

a shaft attached to the handle at a proximal end and attached to the working head at a distal end;

at least a first actuator operably connected to the first manipulator for moving the first manipulator from the retracted position to the extended position.

12. The retractor of claim 11, comprising:

a first movable rack attached to the first actuator; and

a first pinion engaged with the rack, the first pinion being connected to the proximal end of the first rod.

13. The retractor of claim 12, comprising a first wire having a proximal end attached to the first actuator and a distal end attached to the first rack.

14. The retractor of claim 12, wherein the first actuator is slidably connected to the handle and the first movable rack and the first pinion are disposed within the handle.

15. The retractor of claim 12, comprising:

a second actuator operably connected to the second manipulator for moving the second manipulator from the retracted position to the extended position;

a second movable rack attached to the second actuator; and

a second pinion engaged with the second rack, the second pinion being connected to the proximal end of the second rod.

16. The retractor of claim 11, wherein the handle has a docking port that permits an instrument to be detachably attached to the handle.
17. The retractor of claim 1, wherein the working head is concave.
18. The retractor of claim 1, wherein the working head is spoon-shaped.
19. The retractor of claim 1, wherein the working head is at least partially transparent.
20. A method for creating operative space and manipulating a vessel, comprising the steps of:
 - providing a retractor having at least a distal end shaped to define a working space in the tissue of a patient, and a first manipulator having a retracted position and an extended position, the first manipulator disposed at least partially within the working space when the manipulator is in the retracted position;
 - making an incision in a patient;
 - inserting at least the distal end of the retractor into the incision;
 - creating a working space in the tissue of the patient near the vessel with the distal end of the retractor; and
 - manipulating the vessel by moving the first manipulator from the stowed position to the extended position.
21. The method of claim 20, wherein the creating and manipulating steps can be performed using one hand.
22. The method of claim 20, wherein the first manipulator is rotatably connected to the distal end of the retractor, and the manipulating step comprises moving the first manipulator relative to the distal end of the retractor upon actuation of an actuator.
23. The method of claim 22, wherein the first manipulator comprises a first rod and a first paddle attached to a distal portion of the first rod, and the manipulation step comprises rotating the paddle about an axis defined by the first rod to move the vessel away from the distal end of the retractor.

24. A method of creating operative space and manipulating a vessel, comprising the steps of:

providing a retractor defining a working space in the tissue of a patient, and a first manipulator and a second manipulator, each of which are disposed at least partially within the working space, the first manipulator and the second manipulator each having a retracted position and an extended position;

making an incision in a patient;

inserting at least the distal end of the retractor into the incision;

creating a working space in the tissue of the patient near the vessel with the distal end of the retractor; and

manipulating the vessel by moving one of the first manipulator and the second manipulator from the stowed position to the extended position.

25. An instrument for manipulating a vessel in a patient comprising:

a working head shaped to define a working space in the tissue of a patient;

a first manipulator disposed within the working space having at least a first portion and a second portion, the first and second portion connected by an intermediate portion; and

a second manipulator disposed within the working space having a mating portion configured to be disposed between the first and second portion of the first manipulator when the first and second manipulators are in the stowed position.

26. The instrument of claim 25, wherein the second manipulator comprise at least a third portion configured such that the mating portion and the third portion are interlaced with the first and second portion of the first manipulator when the first and second manipulators are in the stowed position.

27. A retractor for harvesting vessels, comprising:

a handle;

a working head, extending from the handle, defining a working space for manipulating vessels;

a first manipulator rotatably connected to the working head;

a second manipulator rotatably connected to the working head;

a first actuator operatively connected to the first manipulator; and
a second actuator operatively connected to the second manipulator, the first and second actuators being disposed at least partially within the handle and configured to be operated using one finger.

28. The instrument of claim 27, wherein the handle is configured to be held by one hand of a user, and the first and second actuators are configured to be operated using a finger of the one hand of the user.

29. The instrument of claim 27, wherein the second manipulator is offset from the first manipulator along a medial axis.

30. The instrument of claim 27, wherein the first and second actuators are slidably connected to the handle.